

SEQUENCE LISTING

5 <110> Michel, Albrecht
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Netherland, Michael D.
Dayan, Franck E.
Arias de Ares, Renee S.

10 <120> HERBICIDE-RESISTANT PLANTS, AND POLYNUCLEOTIDES AND
METHODS FOR PROVIDING SAME

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Phe Ile Asn Pro Asp Glu Leu Ser Met Gln Cys Ile Leu Ile Ala Leu
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Ser Arg Gly Gly Glu Val Arg Leu Asn Ser Arg Ile Lys Lys Ile Glu
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Gln Ile Thr Gly Asp Ala Tyr Val Cys Ala Thr Pro Val Asp Ile Phe
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Lys Leu Leu Val Pro Gln Glu Trp Ser Glu Ile Thr Tyr Phe Lys Lys
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Asp Arg Lys Leu Asn Asn Thr Tyr Asp His Leu Leu Phe Ser Arg Ser
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Gln Asn Leu Phe Gly Glu Leu Arg Ile Glu Asp Arg Leu Gln Trp Lys
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Phe Ala Ile Gly Leu Leu Pro Ala Met Val Gly Gly Gln Pro Tyr Val
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Val Pro Asp Arg Val Asn Asp Glu Val Phe Ile Ala Met Ser Lys Ala
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50 Gly Thr Gln Ile Thr Gly Asp Ala Tyr Val Cys Ala Thr Pro Val Asp
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Lys Lys Leu Glu Lys Leu Val Gly Val Pro Val Ile Asn Val His Ile
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Glu Tyr Tyr Asp Pro Asn Arg Ser Met Leu Glu Leu Val Phe Ala Pro
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465 470 475 480
10 Ser Lys Ala Lys Ile Leu Lys Tyr His Ile Val Lys Thr Pro Arg Ser
485 490 495
Val Tyr Lys Thr Val Pro Asn Cys Glu Pro Cys Arg Pro Leu Gln Arg
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Ser Pro Ile Glu Gly Phe Tyr Leu Ala Gly Asp Tyr Thr Lys Gln Lys
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10 gtg att gct gga gca gga tta gct ggt tta tca acg gca aaa tat ctg
337 Val Ile Ala Gly Ala Gly Leu Ala Gly Leu Ser Thr Ala Lys Tyr Leu
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20 ggt gga aag ata gct gct tgg aag gat gaa gat gga gat tgg tat gaa
433 Gly Gly Lys Ile Ala Ala Trp Lys Asp Glu Asp Gly Asp Trp Tyr Glu
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25 act ggg ctt cat atc ttt ttt gga gct tat ccc aac ata cag aac ttg
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180 185 190

40 ttt cct gaa aca ttg cct gca ccc tta aat gga ata tgg gcc ata cta
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721 Gly Leu Leu Pro Ala Met Val Gly Gly Gln Ala Tyr Val Glu Ala Gln
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| 817 | | | | |
| 5 | Arg Val Asn Asp Glu Val Phe Ile Ala Met Ser Lys Ala Leu Asn Phe | | | |
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| | ata aat cct gat gag tta tcc atg cag tgc att ctg att gct tta aac | | | |
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| 15 | Arg Phe Leu Gln Glu Lys His Gly Ser Lys Met Ala Phe Leu Asp Gly | | | |
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| 961 | | | | |
| 20 | Asn Pro Pro Glu Arg Leu Cys Met Pro Ile Val Asp His Val Arg Ser | | | |
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| 1009 | | | | |
| 25 | Leu Gly Gly Glu Val Arg Leu Asn Ser Arg Ile Gln Lys Ile Glu Leu | | | |
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| 1057 | | | | |
| 30 | Asn Pro Asp Gly Thr Val Lys His Phe Ala Leu Thr Asp Gly Thr Gln | | | |
| | 340 | 345 | | 350 |
| | ata act gga gat gct tat gtt ttt gca aca cca gtt gat atc ttg aag | | | |
| 1105 | | | | |
| 35 | Ile Thr Gly Asp Ala Tyr Val Phe Ala Thr Pro Val Asp Ile Leu Lys | | | |
| | 355 | 360 | | 365 |
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| 1153 | | | | |
| 40 | Leu Leu Val Pro Gln Glu Trp Lys Glu Ile Ser Tyr Phe Lys Lys Leu | | | |
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| 1201 | | | | |
| 45 | Glu Lys Leu Val Gly Val Pro Val Ile Asn Val His Ile Trp Phe Asp | | | |
| | 385 | 390 | 395 | |
| | aga aaa ctg aag aca tat gac cac ctt ctt ttc agc agg agt tca | | | |
| 1249 | | | | |
| 50 | Arg Lys Leu Lys Asn Thr Tyr Asp His Leu Leu Phe Ser Arg Ser Ser | | | |
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| | ctt tta agt gtt tat gcg gac atg tca gta act tgc aag gaa tac tat | | | |
| 1297 | | | | |
| 55 | Leu Leu Ser Val Tyr Ala Asp Met Ser Val Thr Cys Lys Glu Tyr Tyr | | | |
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Asp Pro Ser Arg Ser Met Leu Glu Leu Val Phe Ala Pro Ala Glu Glu
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Trp Val Gly Arg Ser Asp Thr Glu Ile Ile Glu Ala Thr Met Gln Glu
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Leu Ala Lys Leu Phe Pro Asp Glu Ile Ala Ala Asp Gln Ser Lys Ala
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1489
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Thr Ile Pro Asp Cys Glu Pro Cys Arg Pro Leu Gln Arg Ser Pro Ile
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1585
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35 530 535 540

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1681
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50 55 60
Pro Pro Leu Glu Asn Thr Ile Asn Phe Leu Glu Ala Gly Gln Leu Ser
65 70 75 80
25 Ser Phe Phe Arg Asn Ser Glu Gln Pro Thr Lys Pro Leu Gln Val Val
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Ile Ala Gly Ala Gly Leu Ala Gly Leu Ser Thr Ala Lys Tyr Leu Ala
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Asp Ala Gly His Lys Pro Ile Leu Leu Glu Ala Arg Asp Val Leu Gly
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Gly Lys Ile Ala Ala Trp Lys Asp Glu Asp Gly Asp Trp Tyr Glu Thr
130 135 140
Gly Leu His Ile Phe Phe Gly Ala Tyr Pro Asn Ile Gln Asn Leu Phe
145 150 155 160
35 Gly Glu Leu Gly Ile Asn Asp Arg Leu Gln Trp Lys Glu His Ser Met
165 170 175
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Pro Pro Glu Arg Leu Cys Met Pro Ile Val Asp His Val Arg Ser Leu
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Pro Asp Gly Thr Val Lys His Phe Ala Leu Thr Asp Gly Thr Gln Ile

| | | | | |
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| | Thr Gly Asp Ala Tyr Val Phe Ala Thr Pro Val Asp Ile Leu Lys Leu | | | |
| | 355 | 360 | 365 | |
| | Leu Val Pro Gln Glu Trp Lys Glu Ile Ser Tyr Phe Lys Lys Leu Glu | | | |
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| | Lys Leu Val Gly Val Pro Val Ile Asn Val His Ile Trp Phe Asp Arg | | | |
| | 385 | 390 | 395 | 400 |
| | Lys Leu Lys Asn Thr Tyr Asp His Leu Leu Phe Ser Arg Ser Ser Leu | | | |
| | 405 | 410 | 415 | |
| 10 | Leu Ser Val Tyr Ala Asp Met Ser Val Thr Cys Lys Glu Tyr Tyr Asp | | | |
| | 420 | 425 | 430 | |
| | Pro Ser Arg Ser Met Leu Glu Leu Val Phe Ala Pro Ala Glu Glu Trp | | | |
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| 15 | Val Gly Arg Ser Asp Thr Glu Ile Ile Glu Ala Thr Met Gln Glu Leu | | | |
| | 450 | 455 | 460 | |
| | Ala Lys Leu Phe Pro Asp Glu Ile Ala Ala Asp Gln Ser Lys Ala Lys | | | |
| | 465 | 470 | 475 | 480 |
| | Ile Leu Lys Tyr His Val Val Lys Thr Pro Arg Ser Val Tyr Lys Thr | | | |
| | 485 | 490 | 495 | |
| 20 | Ile Pro Asp Cys Glu Pro Cys Arg Pro Leu Gln Arg Ser Pro Ile Glu | | | |
| | 500 | 505 | 510 | |
| | Gly Phe Tyr Leu Ala Gly Asp Tyr Thr Lys Gln Lys Tyr Leu Ala Ser | | | |
| | 515 | 520 | 525 | |
| 25 | Met Glu Gly Ala Val Leu Ser Gly Lys Leu Cys Ala Gln Ser Val Val | | | |
| | 530 | 535 | 540 | |
| | Glu Asp Tyr Lys Met Leu Ser Arg Arg Ser Leu Lys Ser Leu Gln Ser | | | |
| | 545 | 550 | 555 | 560 |
| | Glu Val Pro Val Ala Ser | | | |
| | 565 | | | |